

DRAFT RCRA PERMIT
ADMINISTRATIVE RECORD FOR
UNION CARBIDE CARIBE L.L.C.
A SUBSIDIARY OF DOW CHEMICAL COMPANY

	<u>Date of Document</u>	<u>Document (includes associated transmittal letter, if any)</u>
1.	November 6, 1986	Letter of Mr. Christopher J. Daggett, Regional Administrator, EPA Region 2 to Mr Omar Muniz-Diaz, P.E. of UCCLLC granting an exemption from the Minimum Technological Requirements based on Aggressive Biological Treatment to Surface Impoundment.
2.	November 6, 1987	Letter granted Aggressive Biological Treatment Exemption for Aeration Basins.
3.	February 1, 1988	Draft RCRA Facilities Assessment (RFA).
4.	April 27, 1988	Revised Closure Plan for the Energy Systems Unit Tanks (SWMU#19); Tanks: 31D-473, 31D-474, 31D-480; Union Carbide Caribe LLC.
5.	November 1, 1988	Final RCRA Part B Permit.
6.	January 1989	Stabilization/Solidification of CERCLA and RCRA Wastes, EPA/625/6-89/022.
7.	January 21, 1991	Annual Review (1990) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
8.	January 1992	Annual Review (1991) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
9.	January 14, 1993	Annual Review (1992) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
10.	April 26, 1993	RCRA Part B Renewal Permit Application (Volumes 1, 2, and 3, 4 and 5).

11. April 26, 1993 Puntilla Waste Management Area Groundwater Sampling and Analysis Plan.
12. April 26, 1993 Industrial Landfill Waste Management Area Groundwater Sampling and Analysis Plan.
13. August 9, 1993 Detection RFI Report, Group III SWMUs.
14. August 25, 1993 Addendum to the Detection RFI Report, Group III SWMUs
15. January 14, 1994 Annual Review (1993) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
16. March 8, 1994 Issuance of Notice of Deficiency(NOD) #1 Omitting Several Issues Related to Duration of Permit, Groundwater and ACL.
17. March 23, 1994 Request for extension to respond to NOD (#1)
18. May 20, 1994 Response to EPA's Comments on Union Carbide Caribe Inc.'s (UCCI's) 3rd and 4th Quarterly Groundwater Monitoring Reports for 1993 and the Annual Review of the Groundwater Monitoring System for 1993.
19. May 25, 1994 UCCLLC's Response to Notice Of Deficiency #1.
20. June 24, 1994 RCRA Part B Renewal Permit Application Update.
21. July 14, 1994 Additional Information on Response to EPA's Comments on UCCI's 3rd and 4th Quarterly Groundwater Monitoring Reports for 1993 and the Annual Review of the Groundwater Monitoring System for 1993.
22. January 13, 1995 Annual Review (1994) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
23. March 08, 1995 Comments to Annual (1994) Review of the Groundwater Monitoring System: RCRA Part B Permit.
24. June 06, 1995 Revised Annual Review (1994) of the Groundwater Monitoring System:

RCRA Part B Permit.

25. June 21, 1995 Updated Revision the Part B Renewal Permit Application.
26. July 31, 1995 1995 Second Quarter Groundwater Monitoring Report.
27. August 9, 1995 Notice of Deficiency (NOD) #2 (copy is attached below in December 20, letter).
28. August 9, 1995 Request for extension to respond to NOD (#2).
29. October 20, 1995 UCCLLC's Partial Response to NOD (#2) of August 9, 1995.
30. October 23, 1995 Additional Response to NOD (#2) of August 9, 1995.
31. October 26, 1995 1995 Third Quarterly Progress Report.
32. October 30, 1995 1995 Third Quarter Groundwater Monitoring Report.
33. November 16, 1995 Additional Response to NOD (#2) of August 9, 1995.
34. November 28, 1995 EPA Letter (included in next item) Requesting Additional Document (Influent, Effluent and Run-off Sample Analysis, Cap Design, etc.)
35. December 20, 1995 Additional Response to NOD (#2) of August 9, 1995.
36. January 18, 1996 Annual Review (1995) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
37. May 16, 1996 Part B Permit Application Notice of Deficiencies # 3.
38. July 12, 1996 UCCLLC's Response to NOD (#3) of May 16, 1996: General discussion of Waste Characterization and Related to Land Ban Issues. Revised Part A; Attachments: EPA Letter on NPDES Permit Application status, Analytical Data-Influent to East Aeration Basins, Analytical Data-Digester Sludge, and Analytical Data-Non-Hazardous Wastes.
39. January 21, 1997 Annual Review (1996) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.

40. September 5, 1997 Part B Permit Application Notice of Deficiencies # 4.
41. November 21, 1997 UCCLLC's Partial Response to NOD (#4) of September 5, 1997.
42. January 15, 1998 Additional Response to NOD (#4) of September 5, 1997.
43. January 21, 1998 1997 Annual Review of the Groundwater Monitoring System - RCRA Part B Permit.
44. March 12, 1998 Class 1 Permit Modification letter sent to facility's mailing list. confirming Union Carbide as a Delaware limited liability company (LLC).
45. April 16, 1998 First Quarter 1998 Progress Report - Group I and III SWMU's Reporting Requirements.
46. August 7, 1998 EPA's determination of No Further Action for the WWTPF Underground Effluent Pipe Leak - SWMU No. 36
47. October 5, 1998 Response to EPA Comments on Financial Assurance Documents.
48. December 21, 1998: Conditional approval letter of West Aeration Basin Closure/Post Closure Plan. Letter written to Mr. Jose Pagan, President and Site Manager of Union Carbide, L.L.C. from Mr. Timothy Gordon of EPA Region 2.
49. December 30, 1998 EPA's determination of No Further Action for the Polyethylene Area - SWMU No. 6, Carbon Ponds - SWMU No. 8, Dredge Material Small Boat Landing (Area A) - SWMU No. 9, Dredge Material Energy Systems (Area B) - SWMU No. 10, Dredge Material Near Tallaboa River LF (Area E) - SWMU No. 13, Dredge Material West of WWTP (Area F) - SWMU No. 14, Chemical Addition Station Sump Leakage - SWMU No. 28, Old Anaerobic Basin - SWMU No. 31, Old Ground Burners - SWMU No. 32, Puntilla Disposal Area - SWMU No. 33, Puntilla Tank 1501 - SWMU No. 34, and WWTPF Underground Effluent Pipe Leak - SWMU No. 36
50. January 13, 1999 Cover Letter of Dewatered Sludge Landfill Closure Certification Report-Post Closure Plan Submission.
51. January 21, 1999 1998 Annual Review of the Groundwater Monitoring System - RCRA Part B Permit.

52. January 26, 1999 Conditional approval letter of Class 1 Permit Modification requesting a change from quarterly to semiannual groundwater monitoring. Letter written to Mr. Jose Pagan, President and Site Manager of Union Carbide, L.L.C. from Ms. Nicoletta Diforte of EPA Region 2.
53. January 29, 1999 EPA Region 2 Review Comments on the Closure Plans for the Storage Tanks, the Container Storage Area and the Ground Burners Area.
54. March 9, 1999 Quality Assurance Project Plan for the Analysis of Volatile Organic Compounds and Semi-Volatile Organic Compounds.
55. March 9, 1999 UCCI response to EPA review of the Closure Plans for the Storage Tanks, the Container Storage Area and the Groundburner area.
56. May 6, 1999 Revision of issues number two and four of UCCLLC's response to EPA review of the Closure Plans for the Storage Tanks, the Container Storage Area and the Groundburner area per Conference call discussion with Mr. Jabouin of EPA on March 5, 1999.
57. May 18, 1999 EPA Region2 Comments on the Closure Plans of the Primary Solid Ponds, the Dewatered Sludge Landfill and the Equalization Basins.
58. June 9, 1999 EPA conditional approval of the Closure Plans for the Storage Tanks, the Container Storage Area and the Groundburner area.
59. November 10, 1999 Financial Assurance Corporate Guarantee Document
60. December 1, 1999 Conditional Determination of Technical Completeness of Closure Plans For the Primary Solid Ponds, the Dewatered Sludge Landfill and the Equalization Basins.
61. January 4, 2000 Cover Letter of January 4, 2000 Revising Closure and Post-Closure Plan, Equalization Basins No.1 and No.2, Primary Solids Ponds (PSP) and Dewatered Sludge Landfill (DSL) (Financial Assurance Issues Addressed Here).
62. January 21, 2000 1999 Annual Review of the Groundwater Monitoring System - RCRA Part B Permit.
63. January 28, 2000 Phase I, RCRA Facility Investigation (RFI) Report for Group III SWMUs.

64. March 3, 2000 RCRA Part B Permit Renewal Application Amendment, Volume III, Part 1 Groundwater Monitoring.
65. March 24, 2000 Letter of Support to UCCLLC Financial Assurance.
66. April 13, 2000 Follow up letter on impact of overfilling of Equalization Basins to address issues raised during Public Notice Comments of 1991.
67. May 2, 2000 RCRA Part B Permit Application Amendment, Part 2, May 4, 2000 with Cover letter to Ms. Nicoletta Diforte of EPA Region 2, from Mr. Jose Pagan, President and Site Manager of Union Carbide, L.L.C.
68. August 08, 2000 Phase II, RCRA Facility Investigation (RFI) Report for Group III and Group IV SWMUs.
69. August 30, 2000 Revised Part B Permit Application: Section G: Appendix I, SPCC Plan; Appendix II, MSDSs; and Appendix II, Waste Management Procedures.
70. September 25, 2000 EPA's determination of No Further Action for the Dredge Material West of WWTP (Area F) - SWMU No. 14.
71. September 25, 2000 EPA's determination that Dredged Area "C" - North of Peerless, SWMU No. 11, no longer requires further investigation as part of Phase II of the RFI.
72. January 16, 2001 Annual Review (2000) of Groundwater Monitoring System: Puntilla and Industrial Landfill Compliance Areas, RCRA Part B Permit Requirements.
73. March 2, 2001 Official letters confirming UCCLLC as a subsidiary of the Dow Chemical Company and written to Mr. Ernst J. Jabouin, Nicoletta Diforte and OPM's Permit Assistance Branch of EPA Region 2, from Mr. Jose Pagan, President and Site Manager of Union Carbide, L.L.C.
74. March 7, 2001 NPDES Issues with Potential RCRA Impact.
75. June 1, 2001 Scope of Work for a RCRA Facility Investigation (RFI).
76. June 1, 2001 Scope of Work for a Corrective Measures Study (CMS).

77. November 16, 2001 UCCLLC's response to EPA's concerns regarding the closure of the Equalization Basins and the West Aeration Basin, and addressing concerns regarding the disposal of the sludge from the wastewater treatment plant in the Industrial Landfill.
78. November 26, 2001 UCCLLC's letter to EPA submitting the report, analytical data, and supporting quality assurance/quality control data for the sludge sampling for the Aeration Basin.
79. April 16, 2002 UCCLLC's Proposal and Cost Estimates (Amended); Sampling Program Solid Waste Management Unit for the Equalization Basins and the West Aeration Basin.
80. May 29, 2002 EPA's letter approving the Proposal and Cost Estimates (Amended); Sampling Program Solid Waste Management Unit for the Equalization Basins and the West Aeration Basin.
81. June 17, 2002 Quarterly Groundwater Monitoring Reports for each quarter year from the first quarter of 1989 (1Q89) to the fourth quarter of 1998 (4Q98). Reports are semi-annual beginning in 1999 and continuing to the first half on 2002.
82. July 23, 2002 EPA's comments to UCCLLC's report entitled: Management Level Ecological Risk Assessment for SWMU No. 5, North Cooling Water Outlet Canal (November 28, 2000).
83. August 8, 2002 EPA comments on July 2001 Phase II RFI report, and conditional Approval of No Further Action Determination for SWMUs 3, 29, and 35.